



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

EPA Region 5 Records Ctr.



299704

REPLY TO THE ATTENTION OF:

MEMORANDUM

SE-5J

DATE:

SUBJECT: **ACTION MEMORANDUM** - Request for an Exemption from the 12- Month and \$2 Million Statutory Limit for the Time-Critical Removal Action at the Midwest Metallica Site, Summit, Cook County, Illinois (Site ID #B5J2)

FROM: Brad Benning, On-Scene Coordinator
Emergency Response Section II

TO: Richard Karl, Director
Superfund Division

THRU: Linda Nachowicz, Chief
Emergency Response Branch

I. PURPOSE

The purpose of this memorandum is to request an emergency exemption from the 12-Month and \$2 Million statutory limits for removal actions and document your approval to expend up to \$3,201,600 in order to abate an imminent and substantial threat to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances at the Midwest Metallica site, a bankrupt automobile shredding facility located in Summit, Cook County, Illinois (the "Site"). The hazardous substances consist of lead and poly chlorinated biphenyls (PCBs) contained in the automobile shredder residue ("ASR") which is present to various depths over the 23-acre site and in a large waste pile, exceeding 350,000 cubic yards at the southeast corner of the Site.

The proposed response action will mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances in the large waste pile. Proposed removal actions include, but are not limited to, the assessment and stabilization of chemical hazards at the Site through construction of an impervious cap. The presence of hazardous substances located on the surface of the Site, the potential for off-site migration, the unrestricted access to the property, and the Site's proximity to residential and commercial areas require that this removal be classified as time-critical. The project will require an estimated sixty 10-hour on-site working days to complete.

The Site is not on the National Priorities List ("NPL").

II. SITE CONDITIONS AND BACKGROUND

The CERCLIS ID number for the Site is ILD054348974

A. Site Description

1. Removal site evaluation

A Removal Site Assessment was conducted on March 15, 2000, to determine the extent of the automobile shredder residue ("ASR") previously observed at the Site, and to obtain additional analytical data to warrant a removal action. Samples of the ASR were collected from various locations throughout the Site. Eleven samples were collected at 200 foot intervals along the base of the large pile, and eight samples were collected on the top of the pile. Eight surface samples, a sediment sample and one water sample were also collected. The samples were analyzed for Total lead, TCLP metals, and PCBs. The results identified total lead levels ranging from 20.6 to 180,000 ppm, TCLP lead levels of 0.283 to 94.1ppm, and PCBs from 7.6 to 217.7 ppm. The ASR appears to cover an area in excess of 20 acres with depths ranging from one to 10 feet. The largest volume of ASR is located in the pile along the eastern perimeter and is estimated to contain 350,000 cubic yards. In addition to the ASR, the Site allegedly has four underground fuel storage tanks which probably contained diesel fuel for the Site vehicles. The condition and/or possible contamination from these tanks were not addressed during the initial site assessment activities. These potential fuel tanks are outside the scope of this removal action.

2. Physical location

The Site is located at 7955 West 59th Street in the City of Summit, Cook County, Illinois. Approximately 23 acres in size, the Site is located 10 miles southwest of Chicago, Illinois. The Site is located in the west-central section of Summit, and has the geographic coordinates of latitude 41.46.39 N, longitude 87.49.13 W. The Site is bordered by an industrial complex and 59th Street to the north; by railroad tracks and an automobile junkyard to the east; and by railroad tracks and railroad yard to the south and west. Although the Site is located in an industrial neighborhood, there is significant residential development less than 1000 feet to the southeast of the site.

A Region 5 Superfund Environmental Justice ("EJ") analysis has been prepared for the area surrounding the Site. This analysis is presented in Attachment IV. In Illinois, the statewide population which is defined as low-income is 27 percent and the minority average is 25 percent. To meet the EJ concern criteria, the area within 1 mile of the site must have a population that is twice the state low-income percentage and/or twice the state minority percentage. That is, the area must be at least 54% low-income and/or 50% minority. At this Site, the low-income percentage is 58.1% and the minority is 81.4%, as determined by Arcview or Landview III EJ analysis. Therefore, this Site does meet the Region's EJ criteria based on demographics, as identified in "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998".

3. Site characteristics

The Site previously operated as a scrap metal processing/recycling facility for more than 20 years. The scrap metal shredder was utilized for the processing of scrap metal articles, such as automobile hulks and light iron. The shredding process facilitates separation of ferrous and nonferrous metals from nonmetallic materials contained in the feed material; after separation, the remaining material is commonly referred to as shredder residue. Shredder residues consist predominantly of nonmetallic solid material, including plastic, glass, rubber, soil, carpet and fabric. It is an unconsolidated, heterogeneous solid, medium to dark brown in color and typically exhibiting a slight, musty odor.

Key Site features include the main ASR pile, two sets of abandoned railroad tracks, the former materials processing/shredder area, a surface water impoundment located along the northern edge of the Site, and two office/garage buildings currently being leased to trucking companies. The main ASR pile extends along the Site's eastern border in a north-northeast/south-southwest direction and measures approximately 875 feet along its longest axis. The pile ranges in height from 30 to 70 feet above ground surfaces and in width from 125 to 250 feet. Two separate operations are active at the Site. These companies have leased discrete areas in the west-central and northeastern sections of the Site to conduct their operations. Generally, ground elevations increase by five to 10 feet from north to south, with drainage patterns to the north and northeast. Water and/or leachate from the ASR pile was observed accumulating along the east border and flowing off the Site toward the adjacent automobile junkyard. Other small piles of ASR are located throughout the Site, and many of the berms on Site are constructed of ASR material.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Investigations at the Site have been focused on the exposed ASR material located throughout the Site and specifically in the main ASR pile. Analytical data have indicated that elevated levels of lead and PCBs are present on Site and pose an imminent and substantial threat of release to the environment, as a result of the improper disposal of ASR material. Analytical data also has documented the off-site migration of contaminated water to the adjacent automobile scrap yard.

Inspections in 2001 and 2005 continue to indicate the possibility of elevated temperatures within the main pile of ASR, cracks on the surface of the pile have been visually observed releasing smoke and/or steam, and the most recent inspection in February 2005, steam was observed rising from the entire east slope of the pile.

5. Maps, pictures and other graphic representations

Attachment V

B. Other Actions to Date

1. Previous actions

U.S. EPA's involvement at this Site began as part of an enforcement initiative of the Greater Chicago Geographic Initiative team. Cooperating agencies included the Illinois Environmental Protection Agency and the Illinois Attorney General's Office, which had begun previous enforcement efforts against Midwest Metallica, the facility owner/operator, when that entity was still in business. Sampling was conducted by U.S. EPA's RCRA contractor to determine the contaminant levels present in and RCRA regulatory status of the pile of auto shredder residue. Due to the need to ensure that the initial results were representative of the large ASR pile, on July 29, 1988, U.S. EPA issued an Order to Midwest Metallica pursuant to Section 3013 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6934, requiring investigation of the Site in Summit, Illinois. Midwest Metallica was the most recent owner/operator of the Site, although the previous operator had stockpiled ASR on the subject Site for a number of years. The Remedial Investigation required by the Section 3013 Order was never conducted, as the company filed for bankruptcy shortly after the sampling plan required by the Order had been approved.

In October 1998, the case against Midwest Metallica was referred to the Department of Justice to enforce a possible RCRA 7003 order; however, the referral was returned when questions arose regarding quality assurance issues with the analytical data upon which the Section 3013 Order was based. Upon Midwest Metallica's filing of bankruptcy and the discovery of the data quality assurance issues, U.S. EPA Superfund Division was then contacted to conduct a removal assessment at the Site.

U.S. EPA did participate for a period of time in negotiations with Midwest Metallica subsequent to the bankruptcy filing. However, because the State of Illinois preferred to pursue its previously-filed enforcement action against Midwest Metallica principals (and predecessors), U.S. EPA's enforcement role became secondary to that of the State, and the Agency primarily supported the State's enforcement action.

2. Current actions

U.S. EPA conducted a Removal Assessment at the Site on March 15, 2000, to further characterize the ASR located on Site. Twenty-nine samples were collected and confirmed that the ASR was contaminated with lead and PCBs. The Agency began working with the two trucking companies on Site, which were leasing portions of the property from the bankruptcy trustee, as both had expressed an interest in purchasing the property. Meetings were held with both parties to discuss prospective purchase agreements with the Agency. These meetings were unsuccessful as the cost for removal of the ASR was well beyond the value of the property. The Agency continued to monitor the Site while the Illinois EPA continued its enforcement activities against the previous PRPs.

In the summer of 2001, routine inspections revealed the possibility of an underground fire at the south end of the ASR pile. Smoke was emanating from cracks at the surface of the pile and charred ASR was visible along the southern slope. On June 15, 2001, an infrared flyover was conducted to confirm the potential of an internal fire within the pile. The flyover confirmed a hot spot at the southern end of the pile, although subsequent inspections indicated no external evidence of a fire. U.S. EPA's most recent inspection, conducted on February 23, 2005, (discussed below), indicates the possibility that the internal temperature of the ASR pile remains very high. Over the next two years, the Site remained relatively inactive, the Illinois EPA pursued its case against the PRPs, the two trucking firms continued to utilize the property primarily for parking, and the Agency continued to conduct random inspections.

The Site was inspected on February 1, 2005, and the Agency found that significant activity had taken place. Apparently, a new owner has purchased the back taxes on a portion of the Site, which does not include the large pile of ASR material. Individuals employed by this new owner have removed the vegetation along the north and south perimeters; ASR material in these areas has been graded, and the lagoons along the north perimeter were in the process of being filled. ASR material has been moved and transported to the base of the existing pile. Additionally, cars and trucks are now being parked on the northern portion of the Site; apparently the new owner is preparing these areas for parking and storage. This new owner is aware of the Site conditions and has hired an environmental consultant. The Agency will work with the new owner on all future negotiations regarding mitigation at the Site; Agency strategy is discussed further in the Enforcement Addendum.

A subsequent inspection was conducted on February 23, 2005, to obtain additional photo documentation of the change in Site conditions. Approximately 75 photographs were taken during the inspection depicting various site changes and current conditions. These photographs documented that: (1) ASR had been moved to the base of the pile along the west side; (2) ASR had been pushed and graded along the south boundary just east of the old shredder; (3) the north and southwest perimeters were cleared of all vegetation; (4) lagoons along the north perimeter were being filled with debris and ASR; (5) sections of fence were missing along the north and west perimeter; (6) an old fuel tank was missing from the west base of the pile, creating a large

pool of oil/water which has been released along the west base of the pile; (7) cracks were present at the south end of the pile, releasing steam and/or smoke; (8) the entire east slope showed the presence of steam and/or smoke although the temperature was in the 30's and it was a partly cloudy day; and (9) water and/or leachate continue to move off Site along the east Site perimeter.

C. State and Local Authorities' Roles

1. State and local actions to date

The Illinois Attorney General's office is currently pursuing legal action against the two principal operators of the Site. The trial occurred in July of 2004, and the State is seeking a complete removal of the ASR material present at the Site. The trial outcome and any relief ordered by the court will be discussed in the Enforcement Confidential Addendum.

On April 19, 2005, the Illinois EPA conducted a GPS survey of the area proposed for this removal action to better define the volume of ASR material that would require cover. The GPS data indicates a substantially larger volume of ASR than originally estimated, slightly over 350,000 cu. yds., which is 100,000 cu. yds. higher than the original volume estimate.

2. Potential for continued State/local response

Although the State is pursuing legal action, the State and local authorities do not have the financial resources to take response actions at the Site. The Illinois EPA has indicated that it will undertake the post removal Site control, after the response actions described in this Action Memorandum have been conducted.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A removal action is necessary at the Midwest Metalics Site to abate the threat to public health, welfare or the environment posed by the release and potential release of hazardous substances. The NCP, 40 C.F.R. 300.415(b)(2), provides eight specific criteria for evaluation of a threat and the appropriateness of a removal action. Observations documented during the Site investigation indicate that the Site meets the following criteria for a time-critical removal action. Although there are threats associated with the ASR which is located outside of the large waste pile, the principal threats, as discussed below, derive from the 350,000 cubic yard waste pile. Threats associated with the ASR scattered on the remainder of the Site are expected to be addressed using EPA's enforcement authority, are discussed in the Enforcement Addendum, and are outside the scope of this removal action.

A. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or the food chain.

This factor is present at the Site due to the threat of wind and water dispersal of contaminants from the waste pile; additionally, the Site is located within 1000 feet of a residential area. Analytical results from the samples collected at the Site confirm the presence of total PCBs, TCLP lead, cadmium and total lead at elevated levels. The maximum reported concentrations for these compounds were 217.7 ppm, 94.1 ppm, 1.07 ppm, and 180,000 ppm, respectively, for the ASR samples. These values all exceed the regulatory or guideline limits established by U.S. EPA for these compounds. Exposure to PCBs can result in chloracne; impaired liver function; a variety of neuro-behavioral symptoms; menstrual disorders; and an increased incidence of cancer. Lead exposure has been shown to produce infertility, retarded mental development in young children, tiredness, constipation, muscle pains, seizures, memory and concentration difficulties, and other symptoms. Contaminant levels for mercury 0.0052 ppm, chromium 0.148 ppm, and lead 7.0 ppm in sample LC-1 exceed Illinois EPA effluent standards set forth in Title 35 of the Illinois Administrative Code, Sections 304.124, and U.S. EPA National Primary Drinking Water Standards set forth in 40 C.F.R. § 141.62 for chromium, lead and mercury. These elevated levels are especially significant because off-site migration of storm water runoff was observed during the Site reconnaissance. The potential health effects of chromium include skin ulcers, stomach ulcers, nose bleed, stomach irritation, convulsions, liver and kidney damage. Headaches, chest pains, nausea, lung irritation and fever are among the acute symptoms of mercury exposure.

B. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.

This factor is present at the Site as almost all the samples collected at the Site were surface or near-surface samples (within 24 inches of ground) and exceeded the recommended regulatory or guideline limits established for these compounds. This indicates that the sample locations are susceptible to erosion impacts. Material from sample locations T-1 through T-8 and S-2 through S-7 have a greater likelihood of erosional impact because the samples were collected within 3-6 inches of the ground surface. The most likely erosion mechanisms at the Site are wind and rain, both excellent mechanisms for off-site material transport. Mechanical transport of contaminants also poses a threat as truck traffic appears to travel over the contaminated areas and potentially may track material off Site.

C. Weather conditions that may cause hazardous substances or pollutant or contaminants to migrate or be released;

This factor is present at the Site as strong winds potentially could carry the light components of the ASR material off Site, allowing lead and PCB contaminants to impact nearby commercial and residential areas. The main waste pile which varies from between 30 and 70 feet above ground surface is likely to be impacted by high wind conditions. The off-site migration of

hazardous substances via storm water runoff was documented in the Removal Assessment. An elevated level of lead (7.0 ppm) was detected in a sample of water that was migrating off Site to an adjacent commercial property. Analytical results from samples collected from the top of the main pile reveal PCBs present at concentrations almost seven times the U.S. EPA cleanup standard (25 mg/kg) and total lead present at concentrations up to 30 times the minimum guideline concentration (1,000 ppm). These levels, combined with the high potential for weather impacts and the proximity of residential housing (less than 1000 feet), represent a substantial threat.

D. Threat of fire or explosion.

This factor is present at this Site due to the existence of combustible ASR material, which if involved in a fire, may pose a health risk to residents that live within 1000 feet of the Site. Among the identifiable material types that were observed in the ASR at the Site were foam, plastics, fabrics, and rubber. These materials are all combustible under certain conditions and, when involved in a fire, have the potential to produce noxious and/or toxic emissions, along with the potential to release the known hazardous substances lead and PCBs. Due to the volume of ASR on-site, a fire would pose an imminent and substantial endangerment to public health and welfare. Prior indication of an internal fire was evident in 2001, and additional inspections in 2005 indicate the internal temperature of the pile may be elevated and that the possibility of an underground fire is extremely high and would pose an imminent risk to the public health.

IV. ENDANGERMENT DETERMINATION

Given the current conditions at the Site and the nature of the hazardous substances on-site, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing and completing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment. The possibility of further releases of the hazardous substances present a threat to the nearby population and the environment via the exposure pathways described in Section III.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

There are obvious time-critical elements present at the Site. The hazardous substances are located in an unsecured Site, with signs of public trespass as fly dumping has been observed at the Site, located near industrial and residential areas, and must be immediately addressed. The proposed removal actions at the Site would eliminate the imminent and substantial threats to human health, welfare, or the environment, as outlined in this memorandum.

The On-Scene Coordinator (OSC) proposes to undertake the following response actions to mitigate threats posed by the presence of hazardous substances at the Midwest Metallics Site:

- a. Develop and implement a Site-specific work plan, including a proposed time line for the main ASR pile and adjacent areas, excluding the property recently purchased through the County tax sale.
- b. Develop and implement a Site-specific health and safety plan.
- c. Establish and maintain Site security measures during the removal actions, which may include security guard service.
- d. Develop and implement an air monitoring and sampling program during removal activities.
- e. Identify, sample and characterize the hazardous substances located at the Site.
- f. Excavate contaminated soil and ASR; stage on-site, as necessary.
- g. Consolidate ASR/soil material in preparation for on-site remediation.
- h. Construct a modified Subtitle D cap to secure the ASR/soil materials.
- i. Provide measures to prevent erosion and control runoff.
- j. Install fencing as needed to secure the disposal (capped) area.

The proposed removal actions outlined above target the large waste pile only.

All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action for treatment, storage or disposal will be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 CFR 300.440, 58 Federal Register 49215 (Sept. 22, 1993).

The removal action will be taken in a manner not inconsistent with the NCP. The OSC has begun planning for provisions of post removal Site control, consistent with the provisions of Section 300.415(1) of the NCP. The following post removal Site control provisions are currently envisioned: (1) fence monitoring and maintenance, (2) cap monitoring and maintenance, and after implementation of this removal action, the post removal Site control will be conducted by the Illinois EPA.

All applicable and relevant and appropriate requirements ("ARARs") of federal and state law will be complied with, to the extent practicable. A federal ARAR determined to be applicable for the Site is the RCRA Off-Site Disposal Policy. A state ARAR determined to be applicable for the Site is the 35 Illinois Administrative Code, Sec. 724, Subpart G, Closure and Post-Closure Care.

Because PCBs were found at the Midwest Metallica Site, the regulations under the Toxic Substances Control Act are applicable to the Site. 40 C.F.R. Part 761, Subpart D, Storage and Disposal, and particularly 40 C.F.R. § 761.61, define the disposal requirements for bulk PCB remediation waste. 40 C.F.R. § 761.61(a)(4)(i)(B) states that PCBs may remain in place at a site in low occupancy areas for PCB concentrations at less than 100 ppm.

Some of the analytical results at the Midwest Metallica Site showed PCBs concentrations above the 100 ppm concentration limit for on-site disposal, as defined by 40 C.F.R. § 761.61. However, the EPA document *Sampling Guidance for Scrap Metal Shredders - Field Manual* (EPA 747-R-93-009), was published in order to provide PCB sampling methodology for addressing ASR, in situations such as those presented by the Site, a large volume, non-homogeneous waste stream. Part of that guidance uses confidence intervals, a means of addressing the concentration of a large pile as a whole. The confidence interval, as applied to ASR, will provide a range of concentrations that the true value of the pile as a whole falls within. The accuracy of that representation is dependent upon the number of samples taken. At Midwest Metallica, samples were taken on November 26, 1996 and March 15-16, 2000. A total of 26 samples were collected. Using the sampling data with the methodology described above, the confidence interval can be expressed, that with 95% certainty, the PCB concentration of the material on site is from 57 ppm to 96 ppm. This would allow for on-site disposal, consistent with the requirements of 40 C.F.R. § 761.61(a)(4)(i)(B).

Under the TSCA regulations, the necessary cap requirements are defined by § 761.61(a)(7); this provision also incorporates the RCRA closure and post closure care requirements of 40 C.F.R. § 264.310(a) and the permeability, sieve, liquid limit, and plasticity index parameter of 40 C.F.R. § 761.75(b)(1)(ii) through (b)(1)(v). The necessary deed restriction requirements are defined by 40 C.F.R. § 761.61(a)(8).

Because TCLP lead levels above the RCRA regulatory limits were also found at the Site, a hazardous waste landfill cap could also be considered applicable at the Site. However, the rules for corrective action management units ("CAMUs"), set forth at 40 C.F.R. § 264.552, could also be considered to be relevant and appropriate and offer significant flexibility in terms of the cap design requirements. 264.552(e)(3)(iv) defines the cap requirements for a CAMU. In the preamble discussion to the federal register notice defining this standard, U.S. EPA made it clear that a number of flexible approaches would meet the requirements of this regulation, 67 Fed. Reg. 2962, 2980 (January 22, 2002) and also made reference to the July 29, 1997 preamble discussions for municipal solid waste landfills (62 Fed. Reg. 40710). A Subtitle C cap would provide a barrier layer next to the waste, a gas migration layer, and a drainage layer, none of which would be present in a Subtitle D solid waste landfill cap.

The Subtitle D cap that would be constructed over the ASR pile is meant to protect against the direct contact threat, the threat of erosion, wind migration of contamination, and spontaneous combustion or fires due to vandalism. Construction of a Subtitle C cap would also add at least \$50,000 per acre, or approximately \$350,000-\$400,000 total, to the costs of the removal action, resources which are simply not available. Given the exigencies of the situation present at the Midwest Metallics Site, such as the high internal temperature of the ASR pile, the possibility that the pile could catch fire, the danger of wind and water dispersal of contaminants, and the proximity of residences to the ASR pile, as well as the fact that a solid waste cap would protect against the principal threats presented by the Site, U.S. EPA has determined that a solid waste municipal landfill cap is appropriate at the Site. In this regard, Illinois EPA has identified 35 IAC Section 811.204, Final Cover, as an ARAR for the design of the solid waste cap. This section requires a minimum of three feet of soil material that will support vegetation which prevents or minimizes erosion over all disturbed areas. U.S. EPA will meet this State ARAR.

Any additional federal and state ARARs will be addressed to the extent practicable.

The response actions described in this memorandum directly address the actual or threatened releases of hazardous substances, pollutants or contaminants at the Site which may pose an imminent and substantial endangerment to public health, welfare, or the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

The estimated costs to complete the above actions are summarized below. These activities will require an estimated sixty 10-hour on-site days to complete. Detailed contractor costs are presented in Attachment II.

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS

Cleanup Contractor Costs	\$2,140,000
Contingency (20%)	<u>428,000</u>
Subtotal	\$2,568,000

Extramural Costs not funded from Regional Allowance

START Costs	100,000
Extramural subtotal	\$ 2,668,000
Extramural contingency (20%)	<u>533,600</u>

TOTAL, REMOVAL PROJECT CEILING	\$3,201,600
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VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

A delay or non action at the Site may result in an increased likelihood of direct contact by human populations to the hazardous substances. Since the Site is easily accessible, the various threats to human health and/or the environment are significantly magnified. Additionally, any delay or non-action will also increase the likelihood of contamination migration off-site into the surrounding commercial and residential neighborhood.

VII. EXEMPTION FROM STATUTORY LIMITS

CERCLA Section 104 (c) states that removal actions can exceed the 12-Month and \$2 million statutory limit if conditions meet either the "emergency exemption" criteria or the consistency criteria. As discussed above, the environmental conditions, and the proposed budget that would be required to address those conditions, necessitate the exemption from the 12-Month and \$2 million statutory limit for the Midwest Metalics Site.

EMERGENCY WAIVER

1. "There is an immediate risk to public health or welfare or the environment;"

A large volume of ASR, contaminated with high levels of lead and PCBs, is present at or near the surface in an area which is close to residences; the ASR remains unsecured. The risks presented by this material are described in detail elsewhere in this Action Memorandum.

2. "Continued response actions are immediately required to prevent, limit, or mitigate an emergency;"

For the reasons stated above, this is a time critical removal action, and response activities must be initiated as soon as practicable. Because of the large volume of ASR that must be contained by this removal action, the removal action will cost more than two million dollars. However, in order to insure financial integrity within the Region, it is possible that it will be necessary to conduct this removal action over a two to three year period.

3. "Assistance will not otherwise be provided on a timely basis;"

Neither state nor local agencies have any resources to complete the removal actions at this Site.

VIII. OUTSTANDING POLICY ISSUES

No significant policy issues are associated with the Midwest Metallica Site.

IX. ENFORCEMENT

For administrative purposes, information concerning confidential enforcement strategy for this Site is contained in the Enforcement Confidential Addendum. The total costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$5,015,378.¹

$$\begin{aligned} &(\text{Direct Costs}) + (\text{Indirect Costs}) = \text{Estimated EPA Costs for a Removal Action} \\ &(\$3,201,600 + \$31,000) + (55.15\% \times \$3,232,600) = \$5,015,378 \end{aligned}$$

Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of Site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual costs from this estimate will affect the United States' right to cost recovery.

X. RECOMMENDATION

This decision document represents the selected removal action for the Midwest Metallica Site located in Summit, Cook County, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site (see Attachment III).

Conditions at the Site meet the criteria of Section 300.415(b)(2) of the NCP for a removal action and meet the statutory criteria. Based on the emergency waiver, I recommend your approval of the proposed removal action and exemption from the 12-Month and \$2 Million statutory limits on removal actions. The total estimated project ceiling, if approved will be \$3,201,600. Of this, an estimated \$3,101,600 may be used for cleanup contractor costs. You may indicate your decision by signing below:

APPROVE: _____

Director, Superfund Division

DATE: _____

8/2/05

DISAPPROVE: _____

Director, Superfund Division

DATE: _____

- Attachments: I. Enforcement Confidential addendum
II. ERRS Contractor Estimate
III. Administrative Record Index
IV. Region 5 Superfund EJ Analysis
V. Maps, Diagrams

cc: D. Chung, U.S.EPA, OERR, 5202G
Michael T. Chezick, U.S. Department of the Interior
Custom House, Room 244
200 Chestnut Street
Philadelphia, PA 19106 w/o Enf. Addendum
B. Everetts, Illinois EPA
Superfund Coordinator, w/o Enf. Addendum

-15-

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NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT I

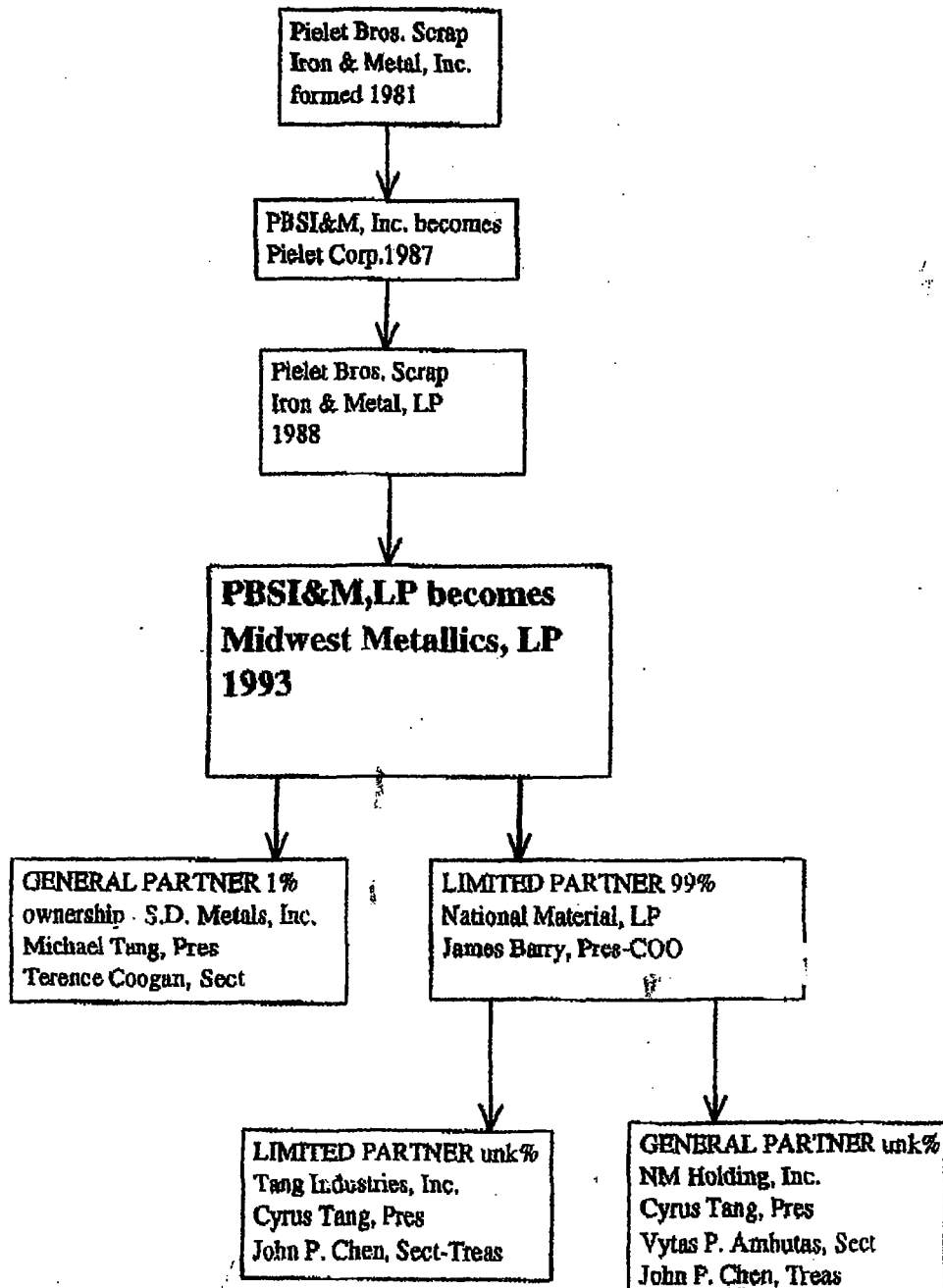
ENFORCEMENT CONFIDENTIAL ADDENDUM

**MIDWEST METALLICS SITE
SUMMIT, COOK COUNTY, ILLINOIS**

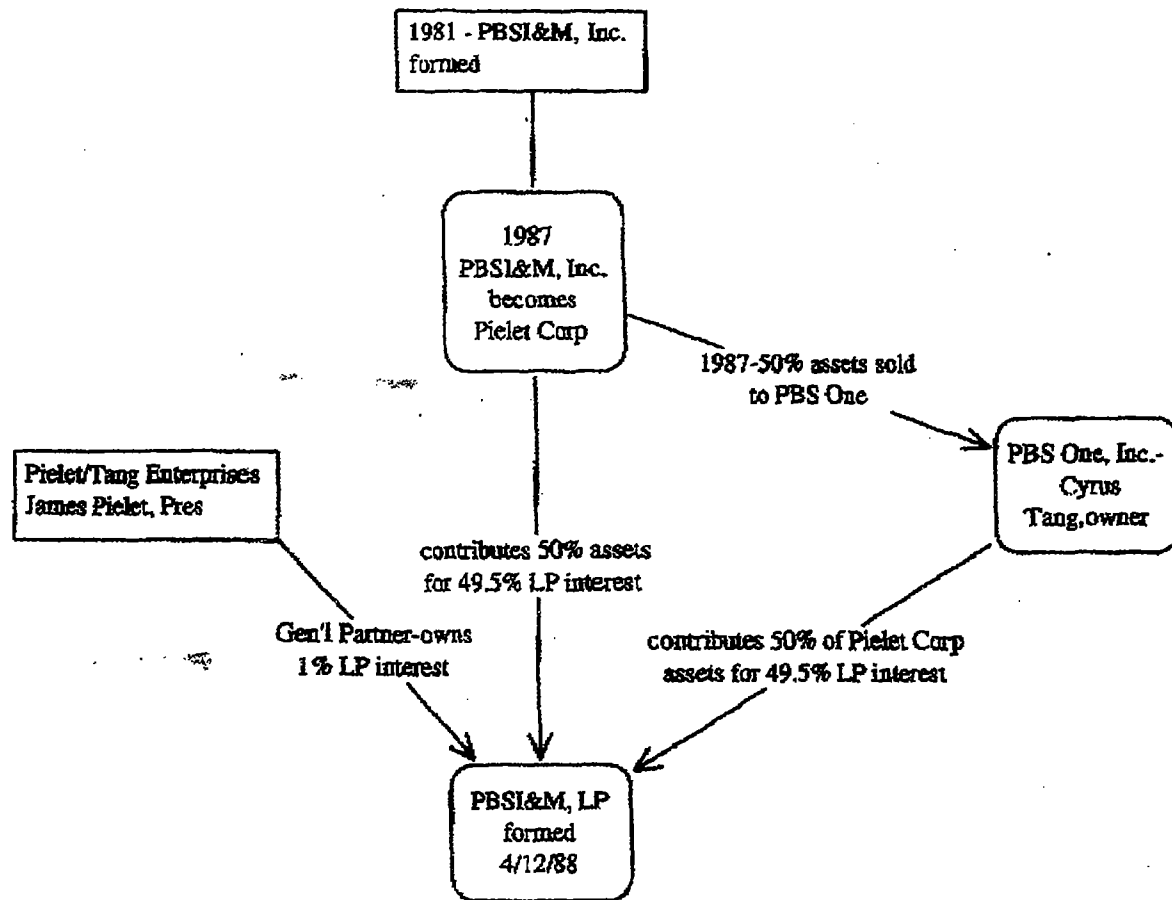
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**ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY**

Midwest Metallics, LP
ORGANIZATIONAL CHART



20



**ATTACHMENT II
ERRS CONTRACTOR COSTS
Midwest Metallica**

CONSOLIDATE AND CONTOUR ASR MATERIAL

PERSONNEL	\$ 455,500
EQUIPMENT	418,644
MATERIALS	<u>170,000</u>
 TOTAL	 \$1,044,144

INSTALL MODIFIED SUBTITLE D CAP

LANDFILL CAP 7.3 ACRES @ \$150,000/ACRE	\$1,095,500
 TOTAL ERRS COSTS (Rounded to nearest thousand)	 \$2,140,000

PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED
NOT RELEVANT TO THE SELECTION OF THE REMOVAL
ACTION

(REDACTED 12 PAGES)



ATTACHMENT III

U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL ACTION

ADMINISTRATIVE RECORD FOR MIDWEST METALLICS SITE SUMMIT, COOK COUNTY, ILLINOIS

ORIGINAL
JUNE 2, 2005

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	1990-1995	Summit, IL Fire Department	File	Eight Summit Fire Department Alarm Reports for the Period January 30, 1990 - January 12, 1995 re: the Property Located at 7955 W. 59 th Street, Summit, IL	8
2	03/00/93	Ryan, J. & C. Lutes, Acurex Environmental Corporation	U.S. EPA	Final Report: Characterization of Emissions From the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue	39
3	08/00/93	U.S. EPA/ OPPTS	U.S. EPA	Sampling Guidance for Scrap Metal Shredders (EPA 747-R-93-009)	60
4	04/20/94	U.S. EPA	File	Two Aerial Photographs re: the Midwest Metallics Site	2
5	00/00/95	Rehmat, A., Institute of Gas Technology, et al.	File	Journal Article: "Auto Fluff Combustion and Ash Agglomerate Formation Studies in a Fluidized-Bed Combuster" (Energy & Fuels 1995, 9, 765-774)	10
6	04/24/97	Eggert, R., Mayer, Brown & Platt	Cazeau, R., Office of Attorney General/ Chicago, IL	Report: "Residue Volume Calculation for Mt. Piolet" w/ Cover Letter	20
7	11/00/98	U.S. EPA/ ESD	U.S. EPA	Aerial Photographic Analysis for the Midwest Metallics Site (TS-PIC-98055-49R/9905549R)	31

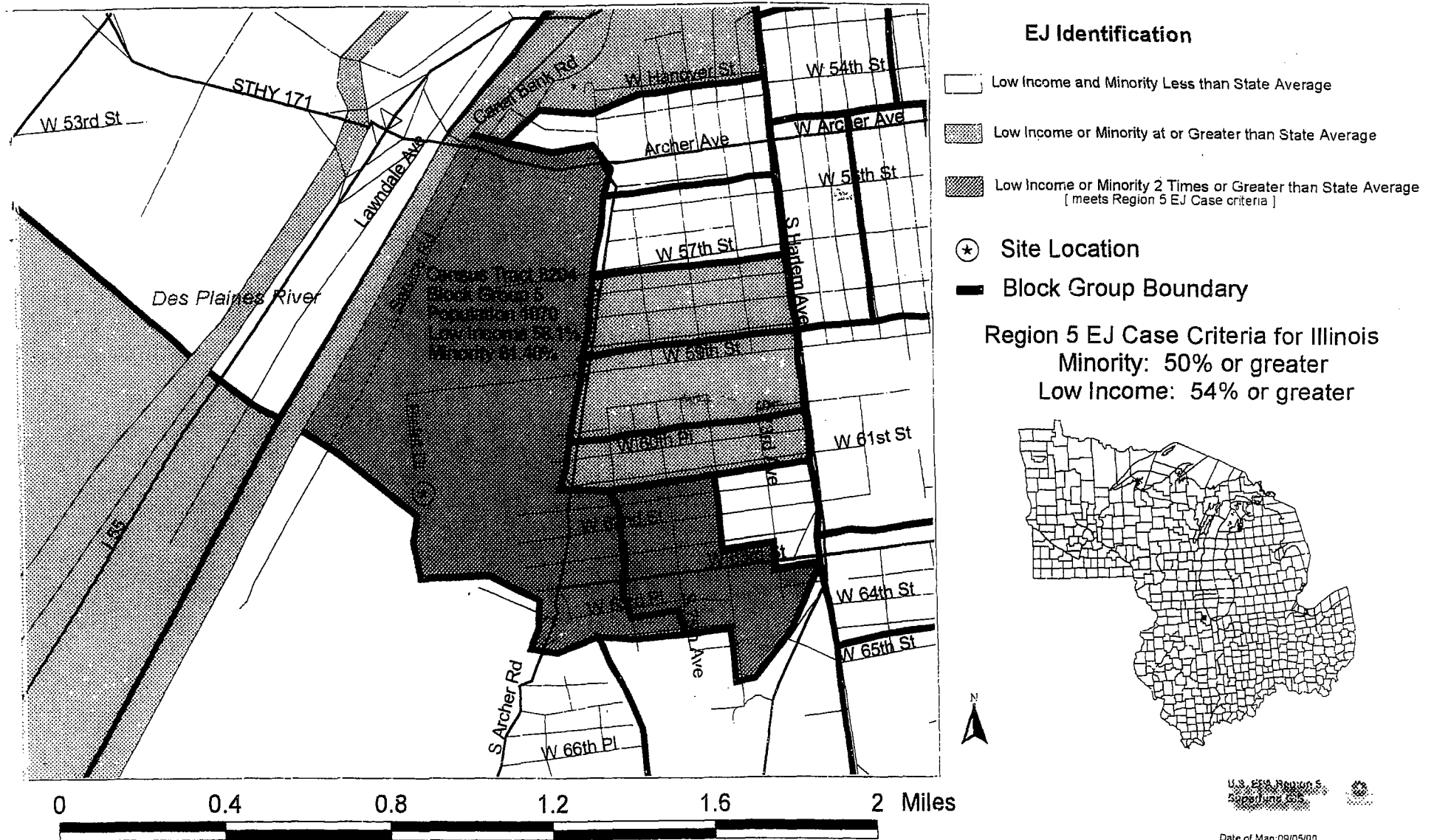
Midwest Metallics
Administrative Record
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8	05/16/00	Ecology & Environment, Inc.	U.S. EPA/ ERB	Site Assessment Report for the Midwest Metallics Site	92
9	05/11/05	Guerriero, M., U.S.EPA/ WPTD	Karl, R., U.S. EPA	Memorandum re: Application of TSCA Regulations	5
10	05/28/04	Bruni, G., Illinois EPA	File	Three Photographs re: the Midwest Metallics Site	3
11	09/02/05	Benning, B., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for an Exemption from the 12-Month and \$2 Million Statutory Limit for the Time-Critical Removal Action at the Midwest Metallics Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	48

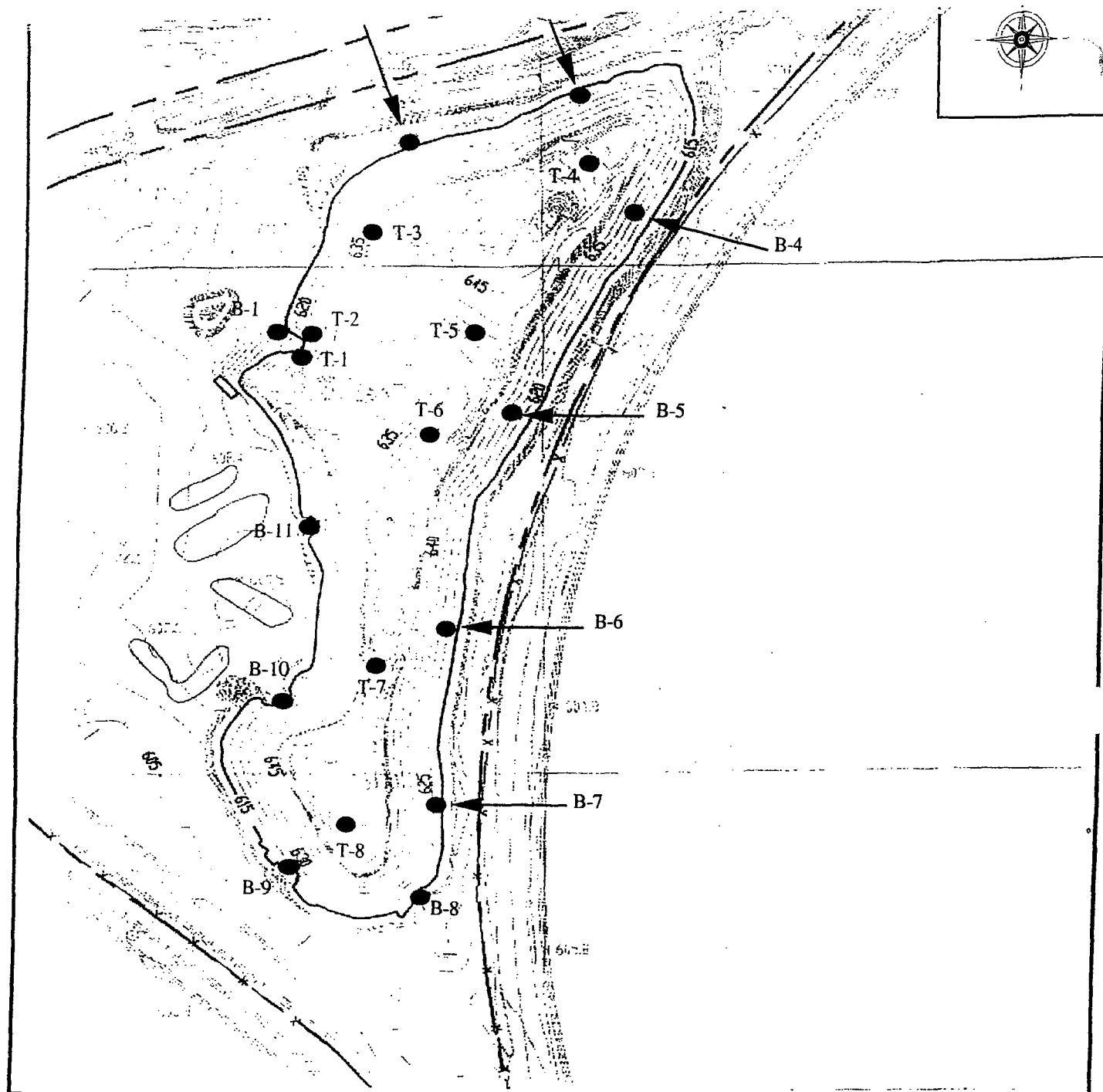
ATTACHMENT IV
REGION 5 SUPERFUND EJ ANALYSIS
Midwest Metallics

Region 5 Supertund EJ Analysis

Midwest Metallics Site Summit, Illinois



ATTACHMENT V
MAPS, PICTURES AND OTHER GRAPHIC REPRESENTATIONS
Midwest Metallica



Legend

● Sample location

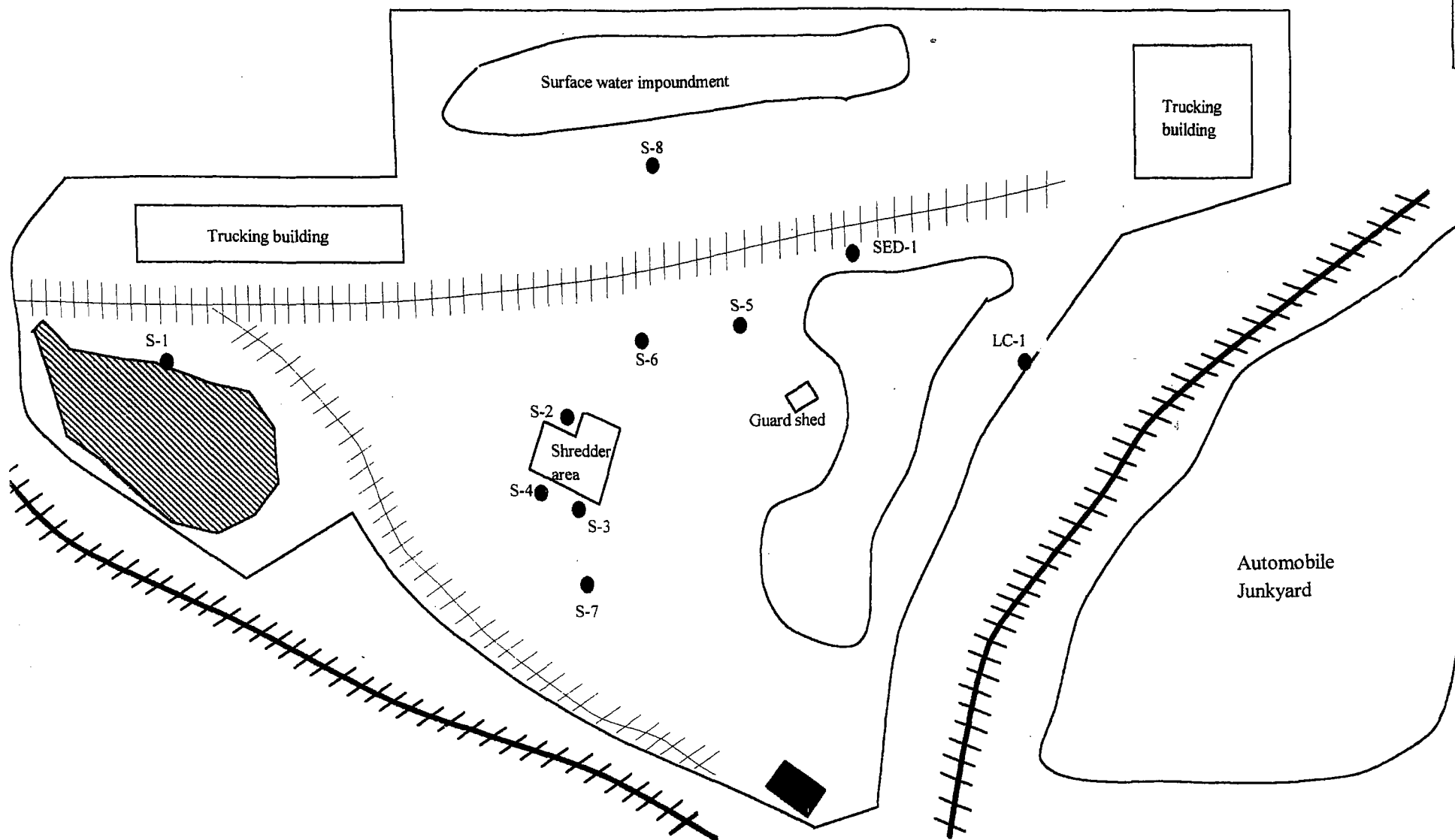


ecology and environment, inc.




Superfund Technical Assessment and Response Team
Region 5

33 North Dearborn Street, Suite 900, Chicago, Illinois 60602

TITLE Sample Location Map - Main Autofluff Pile		FIGURE 3-1
SITE Midwest Metallica		SCALE Not to scale
CITY Summit	STATE Illinois	TDD S05-0001-025
SOURCE Ecology and Environment, Inc.		DATE May 2000



Legend

- acks  Reprocessed autofluff storage area
- cks  Main autofluff pile
-  Sample location



ecology and environment, inc.

Superfund Technical Assessment and Response Team

Region 5

33 North Dearborn Street, Chicago, Illinois 60602

Title	Sample Location Map - Non-pile locations	Figure	3-2
Site	Midwest Metalics	Scale	Not to
City	Summit	State	Illinois
Source	Ecc and Environment, Inc.	TDD	S05-00
		Date	20

ANALYTICAL RESULTS FOR SAMPLES COLLECTED AT BASE OF MAIN AUTOFLUFF PILE
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000

Units = PCBs (µg/kg), TCLP RCRA Metals (mg/L), Total lead (mg/kg), and Percent Moisture (%)

Analytes	Regulatory Limit	Sample Designation											
		B-1	B-2	B-3	B-4	B-5	B-6	B-6 (DUP)	B-7	B-8	B-9	B-10	B-11
PCBs													
PCB-1016		15,300	7,400	1,900	1,300	ND	ND	ND	2,700	3,000	2,800	3,400	ND
PCB-1221		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232		15,300	7,400	1,900	1,300	ND	ND	ND	2,700	3,000	2,800	3,400	ND
PCB-1242		50,900	39,700	9,170	6,030	ND	11,500	7,180	12,600	11,700	12,100	17,000	ND
PCB-1248		40,800	36,200	5,550	6,450	ND	ND	5,890	8,060	7,960	9,140	8,860	ND
PCB-1254		76,600	57,300	17,600	3,100	7,610	12,200	10,700	16,300	11,500	14,100	16,200	ND
PCB-1260		18,800	14,200	5,930	5,440	ND	5,030	4,330	5,870	4,160	5,360	15,000	ND
Total PCBs	50,000	217,700	162,200	42,050	23,620	7,610	28,730	28,100	48,230	41,320	46,300	63,860	0.0
TCLP RCRA Metals													
Arsenic	5	ND	ND	ND	0.24	0.16	ND	ND	0.13	ND	0.082	ND	ND
Barium	100	2.47	2.08	3.46	3.47	2.4	1.59	1.39	2	1.08	0.423	3.33	0.22
Cadmium	1	0.483	0.919	0.644	0.619	0.726	0.678	0.803	0.963	0.602	0.544	0.555	0.825
Chromium	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	5	3.4	2.86	25.9	11.4	29.4	4.82	4.91	14.3	6.4	16.3	2.03	2.5
Mercury	0.2	0.013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0033
Selenium	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Other													
Total Lead	1,000-1,500	180,000	13,800	13,200	10,500	9,370	9,310	41,200	9,610	9,230	9,300	8,660	10,400
Percent Moisture	NA	32.2	30.5	15.5	16.9	16.4	24.2	24.5	22.5	16.1	14.1	23.9	19.4

Key:

DUP = Duplicate sample.
PCBs = Polychlorinated biphenyls.
ND = Not detected.
TCLP = Toxicity characteristic leaching procedure.
RCRA = Resource Conservation and Recovery Act.
NA = Not applicable.
µg/kg = Micrograms per kilogram.
mg/L = Milligrams per liter.
mg/kg = Milligrams per kilogram.

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. Concentrations of PCBs are reported in parts per million or mg/kg in the report text. To convert µg/kg to mg/kg, divide the reported value by 1,000.

Source: Suburban Laboratories, Inc., Hillside, Illinois.

ANALYTICAL RESULTS FOR SAMPLES FROM THE TOP OF THE MAIN AUTOFLUFF PILE
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000

Units = PCBs (µg/kg), TCLP RCRA Metals (mg/L), Total lead (mg/kg), and Percent Moisture (%)

Analytes	Regulatory Limit	Sample Designation								
		T-1	T-2	T-3	T-4	T-5	T-6	T-6 (DUP)	T-7	T-8
PCBs										
B-1016		ND	ND	22,700	16,100	8,320	16,800	24,900	19,200	11,600
B-1221		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-1232		ND	ND	22,700	16,100	8,320	16,800	24,900	19,200	11,600
B-1242		ND	16,900	59,500	43,600	ND	ND	ND	ND	ND
B-1248		12,800	ND	31,000	22,800	8,920	20,100	31,800	31,500	27,800
B-1254		ND	17,500	27,500	16,300	ND	ND	ND	ND	ND
B-1260		3,610	ND	9,260	4,090	ND	4,100	3,640	5,940	6,520
Total PCBs	50,000	16,410	34,400	172,660	118,990	25,560	57,800	85,240	75,840	57,520
TCLP RCRA Metals										
Antimony	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	100	1.5	1.59	3.14	2.36	2.47	2.23	2.44	2.6	2.82
Bismuth	1	0.574	0.813	0.31	0.839	0.418	0.789	0.733	0.94	0.844
Cadmium	5	ND	ND	ND	ND	0.087	ND	ND	ND	ND
Chromium	5	3.72	8.2	6.01	23.3	94.1	59.8	27.3	10.4	27.8
Cobalt	0.2	ND	0.0005	ND	ND	ND	ND	0.0007	ND	ND
Copper	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury										
Manganese	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel										
Total Lead	1,000-1,500	15,900	14,100	2,990	10,800	4,140	11,000	10,200	9,610	30,600
Percent Moisture	NA	13.3	6.7	21.1	14.7	9	15.9	17	19.8	13.4

DUP = Duplicate sample.
PCBs = Polychlorinated biphenyls.
ND = Not detected.
TCLP = Toxicity characteristic leaching procedure.
RCRA = Resource Conservation and Recovery Act.
NA = Not applicable.
µg/kg = Micrograms per kilogram.
mg/L = Milligrams per liter.
mg/kg = Milligrams per kilogram.

Shaded cells represent contaminant concentrations exceeding the regulatory limit.
Concentrations of PCBs are reported in parts per million or mg/kg in the report text.
To convert µg/kg to mg/kg, divide the reported value by 1,000.

Suburban Laboratories, Inc., Hillside, Illinois.

Table C-3

**ANALYTICAL RESULTS FOR SAMPLES FROM NON-PILE AREAS
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000**

Units = PCBs (µg/kg), TCLP RCRA Metals (mg/L), Total lead (mg/kg), and Percent Moisture (%)

Analytes	Regulatory Limit	Sample Designation							
		S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8
PCBs									
PCB-1016		NA	NA	9,870	10,600	9,020	20,300	8,600	13,100
PCB-1221		NA	NA	NA	NA	NA	NA	NA	NA
PCB-1232		NA	NA	9,870	10,600	9,020	20,300	8,600	13,100
PCB-1242		48,900	41,600	26,100	27,500	26,100	49,600	19,400	30,000
PCB-1248		32,200	18,100	1,300	14,200	13,600	25,600	7,420	11,600
PCB-1254		50,000	14,600	14,500	10,100	10,900	23,200	5,490	6,040
PCB-1260		37,200	3,600	3,730	NA	4,340	13,000	1,400	1,500
Total PCBs	50,000	168,300	77,900	65,370	73,000	72,980	152,000	50,910	75,340
TCLP RCRA Metals									
Arsenic	5	NA	NA	NA	NA	NA	NA	NA	NA
Barium	100	0.71	1.26	2.52	1.77	2.4	2.84	1.97	1.03
Cadmium	1	1.07	0.178	0.366	0.274	0.336	0.403	0.256	0.248
Chromium	5	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	1.18	NA	0.283	0.879	0.14	1.39	1.55	NA
Mercury	0.2	NA	NA	NA	0.0005	NA	NA	NA	NA
Selenium	1	NA	NA	NA	NA	NA	NA	NA	NA
Silver	5	NA	NA	NA	NA	NA	NA	NA	NA
Other									
Total Lead	1,000-1,500	8,270	2,780	2,170	2,570	3,950	2,700	2,480	20.6
Percent Moisture	NA	34.5	42	13.1	6.6	24.8	23	4.5	19.4

Key:

PCBs	=	Polychlorinated biphenyls.
TCLP	=	Toxicity characteristic leaching procedure.
RCRA	=	Resource Conservation and Recovery Act.
NA	=	Not applicable.
µg/kg	=	Micrograms per kilogram.
mg/L	=	Milligrams per liter.
mg/kg	=	Milligrams per kilogram.

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. Concentrations of PCBs are reported in parts per million or mg/kg in the report text.
To convert µg/kg to mg/kg, divide the reported value by 1,000.

Source: Suburban Laboratories, Inc., Hillside, Illinois.

TABLE C-5

**ANALYTICAL RESULTS FOR LIQUID SAMPLE
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000**

Units = mg/L, except Percent Moisture (%)

Analytes	Regulatory Limit		Sample Designation
	SDWA	Illinois EPA	LC-1
PCBs			
PCB-1016			ND
PCB-1221			ND
PCB-1232			ND
PCB-1242			ND
PCB-1248			ND
PCB-1254			ND
PCB-1260			ND
Total PCBs	NA	NA	0.0
Total RCRA Metals			
Arsenic	NA	0.25	ND
Barium	2	2	1.34
Cadmium	0.005	0.15	ND
Chromium	0.1	0.1	0.148
Lead	0.015	0.2	7.0
Mercury	0.002	0.0005	0.0052
Selenium	0.05	NA	ND
Silver	NA	0.1	ND
Other			
Total Lead	0.2	0.005	7.0
Percent Moisture	NA		99.2

Key:

SDWA	=	Safe Drinking Water Act.
Illinois EPA	=	Illinois Environmental Protection Agency.
PCBs	=	Polychlorinated biphenyls.
ND	=	Not detected.
RCRA	=	Resource Conservation and Recovery Act.
NA	=	Not applicable.
mg/L	=	Milligrams per liter.

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. SDWA regulatory limits are from Title 40, Code of Federal Regulations, Section 141.62.
3. Illinois EPA regulatory limits are from Title 35, Illinois Administrative Code, Section 304.124, except for mercury limit (304.126).

Source: Suburban Laboratories, Inc., Hillside, Illinois.

**ANALYTICAL RESULTS FROM SEDIMENT SAMPLE
MIDWEST METALLICS SITE
SUMMIT, ILLINOIS
MARCH 15, 2000**

Units = PCBs ($\mu\text{g/kg}$), TCLP RCRA Metals (mg/L),
Total lead (mg/kg), and Percent Moisture (%)

Analytes	Regulatory Limit	Sample Designation
		SED-1
PCBs		
PCB-1016		10,500
PCB-1221		ND
PCB-1232		10,500
PCB-1242		ND
PCB-1248		16,500
PCB-1254		ND
PCB-1260		5,300
Total PCBs	50,000	42,800
TCLP RCRA Metals		
Arsenic	5	ND
Barium	100	4.52
Cadmium	1	0.419
Chromium	5	ND
Lead	5	3.97
Mercury	0.2	ND
Selenium	1	ND
Silver	5	ND
Other		
Total Lead	1,000-1,500	7,370
Percent Moisture	NA	36.8

Key:

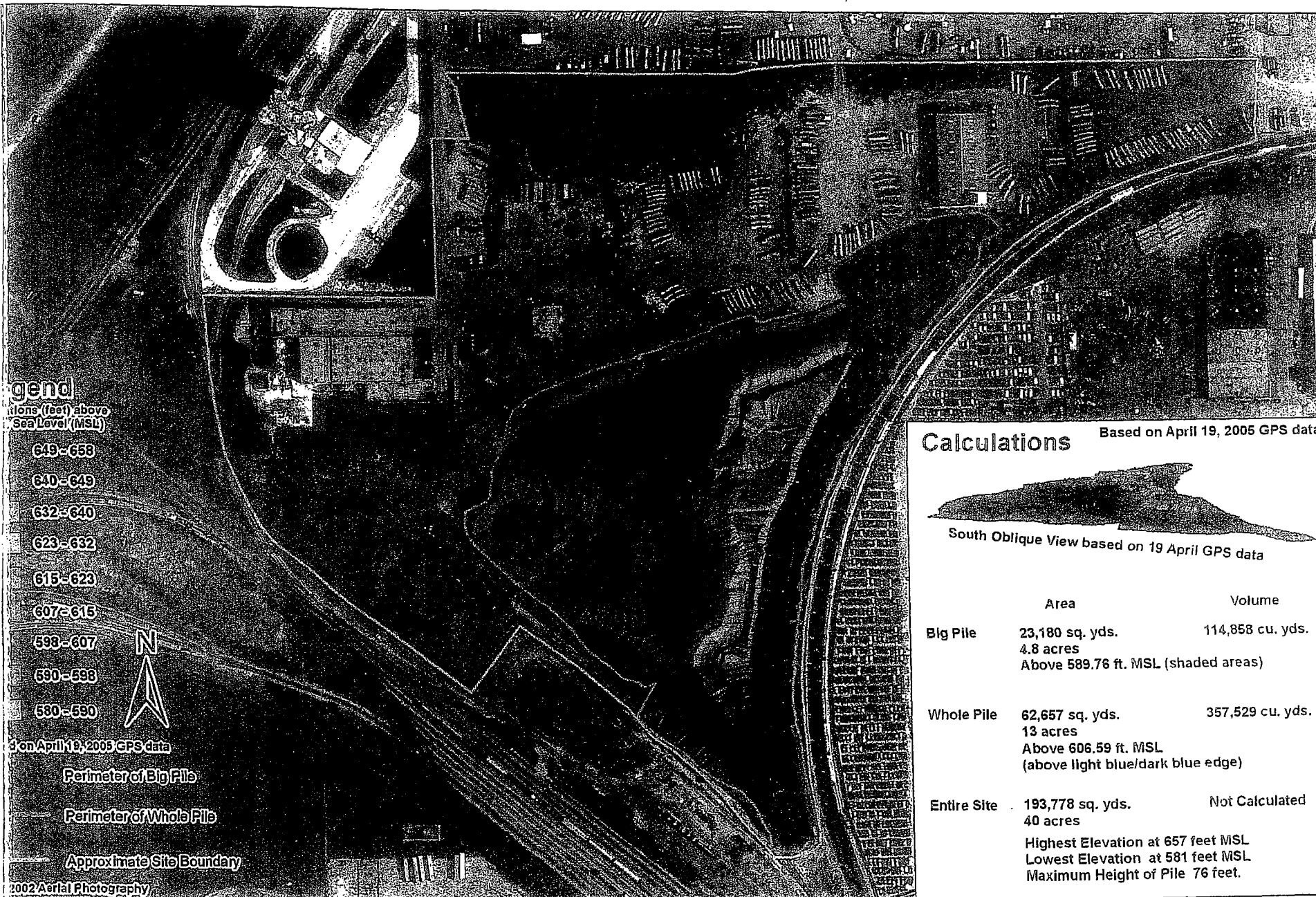
PCBs = Polychlorinated biphenyls.
 ND = Not detected.
 TCLP = Toxicity characteristic leaching procedure.
 RCRA = Resource Conservation and Recovery Act.
 NA = Not applicable.
 $\mu\text{g/kg}$ = Micrograms per kilogram.
 mg/L = Milligrams per liter.
 mg/kg = Milligrams per kilogram.

Notes:

1. Shaded cells represent contaminant concentrations exceeding the regulatory limit.
2. Concentrations of PCBs are reported in parts per million or mg/kg in the report text. To convert $\mu\text{g/kg}$ to mg/kg , divide the reported value by 1,000.

Source: Suburban Laboratories, Inc., Hillside, Illinois.





Comments	Meters	Feet (Rounded)	Meters	Feet (Rounded)	Meters	Feet (Rounded)	Meters	Feet (Rounded)	Meters	Feet (Rounded)	Meters	Feet (Rounded)	Meters	Feet (Rounded)
W1	179.76	589.76	589.76	52,388.89	12.94	2.94	62,656.59	62,656.59	563,908.77	563,908.77	273,350.45	357.5	357,528.7	357,528.7
		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.0	0.0
Big (above triangle pile)	184.89	606.59	606.59	19,381.87	4.79	4.79	23,180.52	23,180.52	208,624.51	208,624.51	87,815.21	114,857.90	114,857.9	114,857.9
		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.0	0.0
		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.0	0.0
Whole Site		0.00	0.00	162,023.42	40.02	40.02	193,778.39	193,778.39	1,744,003.89	1,744,003.89		0.00	0.0	0.0
		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.0	0.0
Midwest Metallics		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.0	0.0
(19 April 2005)		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.0	0.0